Green Banking Initiatives in India: A study of selected Banks

A

Synopsis

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1 INTRODUCTION

"Green is a process, not a status. We need to think of 'green' as a verb, not an adjective."

- Daniel Goleman (bft, 2021)

Green is becoming a symbol of 'eco-consciousness' in the world. The modern world faces an unprecedented challenge: striking a delicate balance between economic growth and environmental preservation. In this quest for equilibrium, the financial sector has emerged as a powerful catalyst for change. Enter Green Banking - an innovative approach reshaping finance by integrating environmental considerations into its core practices. It stands as a beacon of hope, offering a path towards sustainable development and a healthier planet. Green Banking revolves around a fundamental principle: financial activities should not come at the expense of the environment. It's about embracing a symbiotic relationship between finance and sustainability. This involves funding eco-friendly projects, supporting renewable energy endeavours, and meticulously assessing environmental risks in financial decision-making processes. The purpose is to utilize the resources through initiating cost-cutting, recycling processes, paperless banking, technological devices, electronic (e) - banking services, and green industries. Green banking is creating an operational model and enabling technological improvements. It is changing the stakeholders' mindsets and habits about environmental issues. Green banking involves environment-friendly practices and policies, social responsibilities, and innovative green financial products and services to reduce carbon footprint and minimize waste. It represents an intelligent and forward-thinking mindset focused on envisioning sustainable futures.

1.1 History of Green Banking

Green Banking refers to any banking approach that aims to provide environmental benefits to a country or nation. Transforming a conventional bank into a green bank involves aligning its fundamental operations with initiatives that contribute to environmental improvement. The banking industry has the potential to act as a bridge between economic progress and environmental preservation by encouraging investments that are both environmentally sustainable and socially responsible. The idea of green banking originated in Western nations. Green Banking was formally started in 2003 with a view to protecting the environment. Then the Equator Principles (EPs) were launched and were initially adopted by some leading global banks, such as Citigroup Inc, The Royal

Bank of Scotland, Westpac Banking Corporation. In March 2009, Congressman Chris Van Hollen of USA introduced a Green Bank Act with the aim of establishing a green bank under the ownership of the US government. After present green banking primary decision was to minimize paper use in banking operations because raw materials come from cutting trees and for this reason naturally it increases the Carbon dioxide (CO2) and reduces the Oxygen in the world. Green banking practices encompass two approaches: one involves internal green banking management within the institution, while the other engages bankers to implement eco-friendly strategies in their business operations. Establishing a clean banking environment involves various measures such as online banking, e-statements, green building initiatives, rooftop solar panel installations, both on-site and off-site solar-powered ATMs, utilization of fuel-efficient vehicles, reforestation efforts, efficient waste management, digital banking services, electronic document transmission, and webcam utilization, all contributing to in-house green banking practices. Green banking practices encompass two approaches: one involves internal green banking management within the institution, while the other engages bankers to implement eco-friendly strategies in their business operations. Establishing a clean banking environment involves various measures such as online banking, e-statements, green building initiatives, rooftop solar panel installations, both on-site and off-site solar-powered ATMs, utilization of fuel-efficient vehicles, reforestation efforts, efficient waste management, digital banking services, electronic document transmission, and webcam utilization, all contributing to in-house green banking practices. Financing green projects like solar, wind, and other renewable energy, biogas plants, bio-fertilizer plants, energy-saving equipment, and projects having effluent 6 treatment plants and more, working on specific green projects of banks are major performs by the bankers in their business operation areas. Green banking commences proactive actions to address environmental issues while advancing along with efficient use of natural, human, renewable, and non-renewable resources.

1.2 Green banking

Green banking isn't just about environmental impact; it's also about financial prudence, social responsibility, and fostering a sustainable future for generations to come. The environmental impact of banks isn't directly tied to their banking operations but rather to the activities of their customers. Consequently, the environmental impact resulting from the external activities of banks is significant,

yet challenging to quantify. Moreover, environment management in the banking business is like risk management. It increases the enterprise value and lowers loss ratio as higher quality loan portfolio results in higher earnings. Thus, encouraging environmentally responsible investments and prudent lending should be one of the responsibilities of the banking sector. Further, those industries which have already become green and those, which are making serious attempts to grow green, should be accorded priority to lending by the banks. This method of finance can be called as “Green Banking”, an effort by the banks to make the industries grow green and in the process restore the natural environment. This concept of “Green Banking” will be mutually beneficial to the banks, industries and the economy. Not only “Green Banking” will ensure the greening of the industries but it will also facilitate in improving the asset quality of the banks in future. Green Banking, as defined by the **Institute for Development and Research Technology**, is an umbrella term referring to practices and guidelines that make banks sustainable in economic, environmental, and social dimensions. It aims to make banking processes and the use of IT and physical infrastructure as efficient and effective as possible, with zero or minimal impact on the environment. It is the environment-friendly banking practices that encourage their customers to reduce their carbon footprint through their banking activities. **The Indian Banks Association defines** it as a "Green Bank functions like a normal bank along with considering the social and environmental factors for the protection of the natural resources". **According to RBI**, green banking is to make internal bank processes, physical infrastructure, and Information Technology effective towards the environment by reducing its negative impact on the environment to the minimum level. **The UNEP-FI,** states that a sustainable bank considers the impacts of its operations, various products, and services for the current as well as future generations. To promote a reduction in external carbon emissions, the banks should focus on financing technology and projects that are environment-friendly. Green banking aims at improving operations and technology along with making the client's habits environment-friendly in the banking business.

“जलबिन्दुनिपातेनक्रमशःपूर्यतेघटः|
सहेतुःसर्वविद्यानांधर्मस्यचधनस्यच ||”

1.3 “Quote by chakanya”

“Small drops of water, when they come together, fill up a pot. Similarly, knowledge, good deeds, or

wealth, add up gradually." Just like the small drops of water coalescing, I believe, collectively, we have the power to chart a course toward a more prosperous, equitable, and sustainable future for all. We can contribute to a society where financial inclusion is a reality, where economic opportunities are accessible to all, and where sustainability is not just a goal but a way of life. (taxmanagementindia.in)

2 Major GREEN BANKING PRODUCTS AND SERVICES

The following table shows some of the major green banking products and services which are initiated and being implemented in the Indian banking industry.

Table 1: Major Green Banking Products and Services

Green Mortgages(energy-efficient buildings)	Green car Loans (Electric vehicles)
Online banking Electronic Fund Transfers	Green Credit cards
Green ATMs (Paperless statements)	Green Bonds
Green Financing	Green Saving A/c
Green cards (Deposit Cards)	Green Home Equity Loans
Mobile banking	Green Certificate of Deposits (GCDs)
Solar ATM	Green insurance

(Source: Herath and Herath 2020)

3 Review of literature

3.1 National and international regulatory drives for green banking

Numerous international and local organizations, such as NGOs and multilateral agencies, along with market forces, have spurred the financial sector's adoption of environmental management practices. The United Nations Environment Programme (UNEP) launched the UNEP Finance Initiative in the early 1990s, encouraging about 200 global financial institutions to align with sustainable development goals. This initiative aims to integrate environmental and social dimensions into financial performance and risk assessment, emphasizing the precautionary approach to environmental management. Simultaneously, entities like the International Finance Corporation (IFC) and certain banks, such as ABN Amro and Deutsche, have established environmental units or frameworks to assess and manage non-financial risks. Advocacy groups like Friends of the Earth (FoE) and the Rainforest Action Network (RAN) have challenged banks through campaigns, leading to the formation of coalitions like BankTrack and the Collevecchio Declaration. These movements promote principles of sustainability, responsibility, transparency, and accountability within banking practices. However, in the Indian context, the adoption of global standards like the Equator Principles or participation in initiatives such

as the UNEPFI remains low among banks and financial institutions. The National Environmental Policy (NEP) of 2006 outlines environmental policies and rules for various stakeholders, yet it does not specifically address the role of financial institutions. Despite this, NEP emphasizes standardized environmental management practices for industries, potentially influencing other stakeholders like the banking sector to enhance their environmental responsibility. Recently the Reserve Bank of India (RBI) has taken steps in this direction by releasing a discussion paper on climate risk and sustainable finance. The Reserve Bank of India (RBI) released a paper on July 27, 2022. The paper was released in accordance with the Statement on Development and Regulatory Policies in April 2022. The RBI also released a report of the Survey on Climate Risk and Sustainable Finance in January 2022. The survey assessed the approach, level of preparedness, and progress of 32 scheduled commercial banks. The survey highlighted the significant challenges that Indian commercial banks faced in making their lending practices contribute effectively to the global efforts in addressing the climate crisis. Recognizing climate-related financial risks, the RBI proposed a disclosure framework and established a 'Sustainable Finance Group' (SFG) to lead regulatory initiatives in sustainable finance and climate risk within the banking sector. These efforts signal a growing acknowledgment and action towards integrating environmental considerations into India's financial landscape.

3.2 Green banking meaning and initiatives taken by banks

In a 2017 study by the IFC, five G20 countries (Brazil, China, Indonesia, Mexico, and Turkey) in the early stages of green banking adoption were examined. Four key indicators for tracking green banking were identified: banking commitments, financial flows to green investments, financial risk related to environmental factors, and environmental and social outcomes. Additionally, two critical aspects of banking operations were highlighted: risk management to mitigate environmental harm and eco-friendly loan origination, particularly for renewable projects and technologies. In a 2016 study by Md. Ali Arshad Chowdhury and MouriDey, "green banking" was defined as banking practices that prioritize social, economic, and environmental factors to conserve natural resources. These eco-friendly initiatives reduce carbon footprints, enhance a bank's reputation, and promote a socially and environmentally conscious image. Developed countries have successfully adopted green banking, serving as a model for nations like India. The study examined Bangladesh Bank's (BB) green policies,

guidelines, and budgets for commercial banks, suggesting strategies like interest-free financing for pollution control projects. Quick decision-making by management and capacity for eco-friendly lending contributed to better performance. Future research could explore environmental fund allocation and project operational costs. Jha & Bhome (2013) in their paper entitled "A Study of Green Banking Trends in India" studied the green banking initiatives taken by the public sector bank in India and the way of going green by green banking. The primary goal of the paper is to explore the green banking sector and assess the level of awareness among employees, associates, and the general public regarding the concept of green banking. Moreover, the study recommends offering lower interest rates on loans for green projects compared to the standard rates and highlights that companies can boost their profitability through waste recycling initiatives. They should stress green mortgage loans, green credit cards, and online banking. Karytsas&5Theodoropoulou (2014) asserted that public awareness of renewable sources of energy can offer numerous benefits. The study revealed that solar, wind; geothermal energy, hydropower, and biomass are widely recognized as primary energy sources, whereas tidal energy, wave energy, and ocean thermal energy are less familiar. In this context, a green product is defined as a product that incorporates recycled resources in its design and/or attributes, aims to provide environmental benefits, or minimizes toxic environmental impact throughout its life cycle and acquisition process. Thus, the use of non-renewable resources is minimized, toxic materials are avoided, and renewable resources are used according to their renewal rate. Narang, (2015, p.5) Green banking refers to the banking business conducted in such areas and in such a manner that helps the overall reduction of external carbon emissions and internal carbon footprint.

3.3 Technology-enabled green banking and its products

Meena (2013), Garg (2015), Khan et al. (2016), and Herath and Herath (2020) shed light on various green practices applicable in banks, encompassing green communication, marketing, investment, and innovative strategies such as internet banking, mobile banking, paperless banking, branchless banking, green ATMs, green marketing, and eco-friendly buildings utilizing renewable energy like solar power. These strategies effectively minimize the in-house environmental impact of banks. Shaumya and Arulrajah (2017) observe that implementing these activities and operations within the banking sector significantly enhances environmental performance, offering a potential avenue to reduce pollution and

environmental harm. Singhal, Komal & Singhal, Krishna & Arya, Monika (2014) elaborate on the concept of green banking, proposing strategies for banks to adopt environmentally friendly practices. They highlight various green initiatives undertaken by Indian banks, including financing green projects, green mortgages, green credit cards, mobile banking, energy conservation, and online banking services. Bukhari, Hashim, & Amran (2019) emphasize that the surge in green banking stemmed from the global increase in climate change triggered by environmental degradation. Albino (2009) and Khedekar (2014) explore the definition of green products in banking, emphasizing the use of recycled resources, minimizing non-renewable resources, avoiding toxic materials, and leveraging renewable resources according to their renewal rate. Khedekar's research delves into the technologies utilized by the banking industry to promote environmental sustainability, recommending internet banking services, seminars, conferences, and promoting "Virtual Banking" to reduce dependence on physical branches. Park & Kim (2020) note diverse green banking measures initiated by central banks, supervisors, and policymakers globally, addressing risk management concerns in both industrialized and developing nations. In essence, these studies collectively underscore the significance of green practices in banking, offering innovative strategies to reduce environmental impact and mitigate challenges associated with environmental degradation and climate change.

3.4 Behaviour and satisfaction level of customer

Chang and Fong (2010) highlighted the increasing environmental consciousness among consumers, noting their growing preference for products and services with minimal environmental impact. They emphasized the significant impact of an institution's environmental image on sales, competitive advantage, and customer satisfaction. Malliga and Rewathi (2016) anticipated that innovative banking products would not only save time and costs but also contribute to environmental preservation. They pointed out that investors tend to favor institutions adhering to pollution standards, influencing how customers perceive such institutions based on their environmental concern. Bukhari, Fathyah, and Azlan (2019) shed light on how the adoption of green banking practices is influenced by customers, consumers, the community, and management. This has led to a global trend in banking institutions embracing environmentally friendly practices driven by the concept of "green banking." Sharma & Choubey (2022) stressed the importance of three green banking initiatives - the creation of eco-

friendly products, incorporation of green corporate social responsibility, and implementation of environmentally conscious internal processes - aiming to establish a positive green brand image and cultivate trust in environmentally responsible practices. Khan and Szegedi (2019) emphasized the role of the banking sector in addressing Pakistan's environmental concerns, emphasizing the need for green strategies and heightened customer awareness and education. Bahl (2012) outlined the green banking initiatives of various Indian institutions and strategies for their implementation. Yadav & Pathak (2013) observed the adoption of green banking approaches by both public and private sector banks, noting a more proactive approach in public banks. Jeucken (2001) discussed the crucial role of the financial sector in achieving sustainability, focusing on the triple bottom line of commercial, environmental, and social success. Lalon (2015) analyzed the green banking initiatives of commercial banks in Bangladesh, exploring policy adoption and comparisons between different banks. Ganesan and Bhuvaneswari (2016) examined customer awareness of green banking, highlighting the major green banking services provided by SBI and ICICI banks. They also found a correlation between education qualifications and the usage of green banking services. Additionally, Dhamija, Ankita, and Diksha Sahni's (2021) study concentrated on customer perceptions and their willingness to adopt green banking, stressing the need to address diverse perspectives for achieving sustainable development goals. Meenakshi Sharma and Akanksha Choubey (2021) conducted a qualitative study on the influence of green banking activities on the perception of green brand image and trust among managers in Indian banks. In summary, these studies collectively underscore the significance of green banking, its impact on customer perception, the role of education and awareness, and strategies necessary for achieving sustainable development goals within the banking sector.

3.5 Environment impact and banking operations

Bose, Sudipta, Habib Zaman Khan, and Reza M. Monem (2021) conducted a study titled "Does green banking performance pay off? Evidence from a unique regulatory setting in Bangladesh." Their findings suggest that regulatory interventions promoting sustainable business practices can positively impact financial performance. Such green banking initiatives prove beneficial for all stakeholders involved, showcasing a win-win situation. These findings hold significant implications for governmental and regulatory bodies globally in combating climate change and global warming.

Rahman and Perves (2016), citing Bai's research, established that the concept of green banking aligns a bank's primary objective of conducting banking operations with environmental preservation, transforming banks into ethical and sustainable financial institutions. This shift stimulates environmental and social responsibility. Sindhu (2015) revealed that global banks have implemented formal environmental and social risk policies for their lending activities, becoming signatories to equator principles (EP). These banks engage in practices such as assessing loan impacts and conserving resources like paper, water, and energy. Gupta's study, as cited in Sindhu (2015), underscores that organizations excelling in resource and energy efficiency stand to benefit from future market incentives. There's a growing demand among customers for eco-friendly services, particularly from public institutions assumed to shoulder greater responsibility for environmental issues. Notably, gender plays a crucial role in embracing technology-driven eco-friendly services, with women actively promoting sustainability. Thus, green banking emerges as an effective avenue to reduce carbon footprints and protect the environment. Jayabal and Soundarya (2016) and Ragupathi. M and Sujatha .S (2015) explored green banking initiatives in India. They observed a shift from initial lack of awareness to contemporary banks actively engaging in environmental sustainability. The adoption of green banking practices has raised awareness about global warming and emphasized businesses' role in advancing environmental sustainability. Green banking considers social and environmental aspects to protect natural resources and enhance the quality of life. Recognizing that a bank's activities may not directly impact the environment, the influence of customer choices is significant. Hence, banks must integrate green initiatives into operations, construction projects, investments, and financing strategies. Encouraging environmentally friendly practices among clients is recognized as an effective means to promote adoption of sustainable behaviours.

4 RESEARCH GAP

On the basis of the review of literature conducted by the researcher for this study, the following research gaps were identified-

- Significant studies were found analyzing the customer dimension of green banking practices, but very few studies were found analyzing the employees’ perception of green banking practices.
- Very few studies were found which have comprehensively analysed the customer and employee

perception of green banking in the Agra region.

- The parameters such as Time and cost saving, accessibility, training and development, technology advancement, security & credence, and environmental & social concerns are some of the prominent factors but were not considered much, hence making it a significant research gap.

5 NEED OF THE STUDY

Green banking is indispensable in the contemporary landscape for multifaceted reasons, such as climate change and resource depletion, green banking emerges as a pivotal advocate for environmentally conscious practices. It encourages financial institutions to invest in sustainable projects, renewable energy ventures, and eco-friendly initiatives, actively contributing to environmental preservation. As consumers increasingly gravitate towards socially responsible businesses, banks engaged in green practices not only attract environmentally conscious customers but also bolster their reputation by aligning with ethical and sustainable values. By connecting the city's sustainability goals with the banking sector's involvement, the study aims to explore how these initiatives influence the adoption of eco-friendly practices within the community. The need for this study lies in bridging the gap between financial institutions' efforts and their impact on environmental sustainability, emphasizing the necessity for robust data collection to support and inform the study's objectives.

6 RESEARCH QUESTIONS

The proposed study will try to answer the following research questions:

- What are the perceived barriers or challenges encountered by bank employees when promoting green banking products and services to customers?
- What innovative green banking products and services are emerging in the green banking sector, and how are they impacting the customers?
- Are there specific marketing strategies or communication channels that significantly impact consumers' choices toward green banking?
- Are there significant differences in customer uptake and satisfaction with green banking initiatives between the two sectors?

- What training programs or initiatives are being implemented by banks to educate employees about green banking practices?
- What are the perceived barriers or challenges faced by employees in promoting green banking products to customers?
- What training programs or initiatives related to green banking practices are more prevalent in public sector banks compared to private sector banks?
- How do public sector banks allocate funds toward green initiatives compared to private sector banks?

7. STATEMENT OF THE PROBLEM

In the wake of robust development and technological advancement the climatic condition, environment and the health of the people around the globe is deteriorating. The countries around the world have gained the conscience to protect and preserve what is on the verge of being lost. The industries and prominent business sectors are making efforts to bring sustainability in their practices in order to protect the environment and business sector is not an exception to that. The recent COP 28 being held in UAE also focused on numerous financial commitments addressing the climate change health crisis. It focused on the financial sector practices being carried out. This study aims to examine the attitudes, motivations, and challenges perceived by both employees and customers regarding these sustainability-driven banking practices. Understanding these perspectives is pivotal in shaping effective strategies for fostering greener financial services and promoting a more environmentally conscious approach within the industry.

8. OBJECTIVES

In the proposed study, research objectives are as follows: -

1. To study the conceptual framework and institutional framework of green banking initiatives in India.
2. To examine and compare the performance of green banking initiatives undertaken by selected public and private sector Indian banks.
3. SWOC analysis of green banking initiative based on employee and customer perception of selected public and private sector Indian banks.

4. To prepare an action plan to make green initiatives more familiar and adaptable.

9. Research Design and Methodology:

a. Universe of the study

There are a total of 34 Commercial banks (private and public) banks in India. Out of which 12 are public sector banks and the rest 22 are private sector banks.

(Source: https://rbi.org.in/hindi1/Upload/content/PDFs/APPEH23102021_AP1.pdf)

b. Sampling Technique

The bank selection was determined based on its ranking among the top leading institutions in both the public and private sectors in sustainable finance up until March 31st, 2023.

Table 2: Selection of Banks

Bank Name	Type	Sustainable finance as on 31st March, 2023
SBI	Public	$1 billion
PNB	Public	Rs. 15798.55cr
ICICI	Private	Rs. 556 billion
HDFC	Private	Rs. 3,68,327.66 Cr

(Source: Annual reports of the respective banks for the period 2023.)

c. **Sample Area**

The sample of the study is Agra region which is selected on the basis of Purposive & random sampling.

Data Collection: The present study is based on primary as well as secondary data sources. Data is collected from the customers and employees of bank branches located in Agra region.

Primary Data: Primary data will be collected by administering a well-structured questionnaire and interviews.

Secondary Data: This data collection will be accessed from various sources such as the banks official website, annual reports, sustainability reports, articles, IDRBT Reports, RBI reports etc.

d. Scope of the study

Considering the context of Smart City's achievements in sustainability, Agra Smart City clinched the third position nationwide in the national Smart City award category. Also in the ICCC sustainable model category, Agra Smart City secured the third position for revenue generation and reducing carbon emissions through the satellite command and control centre. This research direction bridges the

gap by connecting the city's sustainability efforts with the financial sector's involvement, providing insights into how banking initiatives contribute to or hinder the adoption of eco-friendly practices within the community. It has become a prominent area for data collection to support the present study.

e. Sample size of Respondents

For customers:

Since the current study population is unknown. The Cochran Infinite sample size formula is used for the study. Sample size (S) =Z2*P*(1-P)/M2

Where S = Sample Size Z = Z score (based on a confidential level of 95%=1.96) P = population proportionate (assumed 50%=0.5) M = margin of Error. (5%=0.05)

S = (1.96)2*0.5*(1-0.5)/ (0.05)2 S = 384.16.

A sample size of 384 was determined; however, for the convenience of the study, 450 responses will be gathered from customers using a random sampling method.

For employees:

Designated branch employees of the selected banks who are responsible for the implementation and carrying out the green banking practices will be contacted and surveyed accordingly for the purpose of collection of the required data. The data will be collected from the branch employees in the Agra region.

f. Statistical Tools for Analysis

In the proposed study the research work will be categorized as both qualitative and quantitative. To analyze the collected data both types of statistical techniques i.e., Descriptive and Inferential statistics will be used to obtain the best reliable results and inferences. Chi-Square test, Test of significance, and other tests as per the requirement of the research work in the proposed study will be undertaken and applied.

g. Variables of the study

Table 3: Variables to be undertaken for customer perception

Variables	**Items**
1.DemographicVariables	Gender
	Educational qualification
	Income level

	Age
	Occupational profile
2. Awareness	Concept of Green Banking
	Green Banking Products and Services
	Source of Information about Green Banking Products
3. Customer Satisfaction	Accessibility
	Security and credence
	Time and cost-saving
	Environmental and social concerns

Table 4: Variables to be undertaken for employee's perception

Variables	**Items**
1.DemographicVariables	Gender
	Educational qualification
	Income level
	Age
2. Awareness	Concept of Green Banking
	Green Banking Products and Services
3. Employee Satisfaction	Occupational Profile (including bank, designation and work experience)
	Time and cost saving
	Accessibility
	Training and development
	Technology advancement

10. Social impact of the study

Uttar Pradesh is a state in India which is not only highly populated but is also a leading contributor in overall GDP and development of the country. Being so prominent, Uttar Pradesh also boasts the highest number of bank branches, its pivotal role in spearheading green initiatives becomes even more pronounced. Agra being the leading smart city of Uttar Pradesh in the category of ICCC Business Model has also clinched the third position award countrywide in revenue generation and reducing carbon emission. In addition to it, Agra also stood at third position countrywide in National Smart City Award. In order to manage and maintain the environmental sustainability banking sector has a major role to play, as it is the financial pillar of any economy. Through initiatives promoting paperless transactions, renewable energy investments, and eco-friendly banking practices, these banks not only contribute to environmental preservation but also facilitate financial inclusion among underserved populations, thereby bolstering economic stability. By spearheading awareness campaigns and educational programs, these initiatives raise consciousness about sustainable living, while their support for community-based green projects cultivates a sense of communal responsibility. Ultimately, these efforts improve health outcomes and an environmentally aware society. Green initiatives by

banks can significantly transform communities by fostering environmental consciousness, encouraging sustainable practices, and driving economic empowerment.

Table 5: Objective Wise Research Methodology

Objective	Methodology
To study the conceptual framework and institutional of green banking practices.	To achieve this objective, the researcher will review the research papers, journals, articles, newspapers and magazines and also will collect the information from the different officials 'websites and reports.
To examine and compare the performance of green banking initiatives undertaken by selected public and private sector Indian banks	To achieve this objective, the researcher will collect the information from the different officials 'websites and reports and will carry out the analysis.
SWOC analysis of green banking initiative based on employee and customer perception of selected public and private sector Indian banks.	To achieve this objective, primary data will be collected with the help of a structured questionnaire and results will be drawn using suitable statistical tests.
To prepare an action plan to make green initiatives more familiar and adaptable.	Based on the analysis, an action plan of suggestive measures will be formulated which can be helpful in the effective implementation

11. Proposed chapterization

The structure of the proposed research will be as follows:

Chapter 1: Introduction

Chapter 2: Review of Literature

Chapter 3: Research Methodology

Chapter 4: Analysis and Result

Chapter 5- Conclusion and Suggestion

REFERENCES

- Albino, V., Balice, A., & Dangelico, R. M. (2009). Environmental strategies and green product development: an overview on sustainability-driven companies. Business strategy and the environment, 18(2), 83-96.
- Bahl, S. (2012). The role of green banking in sustainable growth. International Journal of Marketing, Financial Services and Management Research, 1(2), 27-35.
- Bose, S., Khan, H. Z., & Monem, R. M. (2021). Does green banking performance pay off?

Evidence from a unique regulatory setting in Bangladesh. Corporate Governance: An International Review, 29(2), 162-187.

- Bukhari, S. A. A., Hashim, F., & Amran, A. (2019). Determinants of green banking adoption: a theoretical framework. KnE Social Sciences, 1-14.
- Chang, N. J., & Fong, C. M. (2010). Green product quality, green corporate image, green customer satisfaction, and green customer loyalty. African journal of business management, 4(13), 2836.
- Dhamija, A., & Sahni, D. (2021). Green banking: Perception and willingness of customer to adapt green banking. BIMS Journal of Management, 34.
- Ganesan, R., & Bhuvaneswari, A. (2016). Customer perception towards green banking. IOSR Journal of Economics and Finance, 7(05), 05-17.
- Garg, S. (2015). Green banking: An overview. Global Journal of Advanced Research, 2(8), 1291-1296.
- Gupta, J. (2015). Role of green banking in environment sustainability: A study of selected commercial banks in Himachal Pradesh. International Journal of Multidisciplinary Research and Development, 2(8), 349-353.
- Herath, H. M. A. K., & Herath, H. M. S. P. (2019). Impact of Green banking initiatives on customer satisfaction: A conceptual model of customer satisfaction on green banking. Journal of Business and Management, 1(21), 24-35.
- Herath, H. M. A. K., & Herath, H. M. S. P. (2022). Impact of green banking initiatives on customer satisfaction. IOSR Journal of Business and Management, 24(7), 1-19.
- Jha, N., & Bhome, S. (2013). A study of green banking trends in India. International Monthly Referred Journal of Research in Management and Technology, 2, 127-132.
- Khan_PhD, M. S., Khan, I., Bhabha_PhD, J. I., Qureshi_PhD, Q. A., & Khan, N. A. Q. R. (2015). The Role of Financial institutions and the Economic Growth: A Literature Review. indicator, 7(1).
- Lukose, G., & George, M. A Study on Green Banking and Environmental Sustainability Initiatives by Selected Public and Private Sector Banks in India. axy атХихмс тЧw _хррхмс, 114.

- Malliga, A., & Revathi, K. (2016). Customer awareness on green banking-an initiative by private sector banks in Theni district. International Journal of Economics and Business Review, 5(6), 58-66.
- Meena, R. (2013). Green banking: As initiative for sustainable development. Global Journal of Management and Business Studies, 3(10), 1181-1186.
- Narang, D. (2015). Green banking-a study of select banks in India. International journal of management and commerce innovations, 3(1), 5-12.
- NETWORK, S. B. (2017). Greening the banking System–Experiences from the Sustainable banking Network (SbN). Input Paper for the G20 Green Finance Study Group.
- Park, H., & Kim, J. D. (2020). Transition towards green banking: role of financial regulators and financial institutions. Asian Journal of Sustainability and Social Responsibility, 5(1), 1-25.
- Ragupathi, M., & Sujatha, S. (2015). Green banking initiatives of commercial banks in India. International Research Journal of Business and Management, 8(2), 74-81.
- Rahman, F., & Perves, M. M. (2016). Green Banking Activities in Bangladesh: An Analysis and Summary of Initiatives of Bangladesh Bank. Research Journal of Finance and Accounting, 7(10), 6-7.
- Shaumya, K., & Arulrajah, A. (2017). The impact of green banking practices on bank's environmental performance: Evidence from Sri Lanka. Journal of Finance and Bank Management, 5(1), 77-90.
- Sharma, M., & Choubey, A. (2022). Green banking initiatives: a qualitative study on Indian banking sector. Environment, Development and Sustainability, 24(1), 293-319.
- Sindhu, K. P. (2015). Banking and Environmental Concerns: A Study on Customers' Awareness and Preference on Green Banking. International Journal in Management & Social Science, 3(7), 75-87.
- Yadav, R., & Pathak, G. (2013). Environmental sustainability through green banking: A study on private and public sector banks in India. OIDA International Journal of Sustainable Development, 6(08), 37-48.

WEBSITES

- https://www.rbi.org.in/
- https://www.idrbt.ac.in/
- https://www.unepfi.org/
- https://www.iba.org.in/
- https://www.india.gov.in/national-environment-policy-2006
- https://www.epa.gov/nepa/what-national-environmental-policy-act
- https://www.greenfinanceplatform.org/policies-and-regulations/green-banking-guidelines
- https://www.idos-research.de/uploads/media/WG_3_PB_LINDENBERG___VOLZ.PDF
- https://greenfdc.org/
- https://www.hdfcbank.com/
- https://www.icicibank.com/
- https://www.pnbindia.in/
- https://sbi.co.in/
- https://thebftonline.com/2021/04/08/future-of-bankingthe-future-is-green-why-financial-institutions-should-invest-in-green-business/
- https://www.taxmanagementindia.com/visitor/detail_rss_feed.asp?ID=26942
- https://www.cwejournal.org/vol10no3/green-banking-for-environmental-management-a-paradigm-shift